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ELECTRONIC CONTRACTS AND CONTRACT LAW PRINCIPLES

Yves Pouillet*

These few lines, dedicated to a specialist in contract law, comparative law and consumer protection (and respected colleagues and friends), underscore the contribution brought by an analysis of an undefined number of what are known as 'Web contracts', contracts concluded online with a variety of services, using the 'http' Internet standard, in relation to the general theory of contracts. 'Web contracts' constitute the most advanced form of contracts using information communications technologies.¹ Certain characteristics distinguish them from more primitive variants, whether they are traditional offline contracts (by correspondence), or electronic, as in contracts based on an exchange of digital information: the Electronic Data Interchange (EDI).²

One characteristic is that it abolishes frontiers and opens both to commercial and non-commercial actors a means of drawing up contracts with very little fuss. A second characteristic is certainly the multiplication of parties intervening in the electronic transaction apart from the two contractors. Some of these are part of the chain of the electronic transaction itself: network operators, web hosts or online *shopping malls*, through whose agency the internaut journeys towards the conclusion of a transaction; others remain exterior to this and, without being directly linked to the transaction, play a nonetheless important role by assuring confidence between the parties, by assuring their identity and authenticating their consent, such as certification services, by guaranteeing the quality of their operations or the respect of certain codes of conduct, such as labelling organizations, or finally, by certifying one or more elements of the transaction

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¹ ...or 'electronic contract', that is to say any 'contract concluded at a distance by means of electronic data-processing and data storage equipment', according to the definition given by RJ Barcelo, E Montero, and A Salaün, 'Le projet de directive sur le commerce électronique: Questions choisies', in *Commerce électronique—Le temps des certitudes*, Cahier du Crid, no 17 (Bruylant, Brussels, 2000) 16.

² On this evolution, read A Picot and R Neuburger, 'Electronic Data Interchange: von EDIFACT zu webservices', in *Informatik-Wirtschaft-Recht. Regulierung in der Wissensgesellschaft*, Festschrift für W Kilian, J Taeger, and A Wiebe (eds) (Nomos Verlagsgesellschaft, Baden-Baden, 2004) 513 ff.

(the moment, the reception of the proof) such being the role of *Trusted Third Parties*.³ One must note that the use of interactive technologies avoids the necessity of any material expression of will and offers the possibility of immediate and tailored transactions, which represents certain of the most profound differences between online transactions and classic transactions by correspondence. Finally, we should note the asymmetrical relationship of the two parties to the transaction. One of them is, at the least, transparent,⁴ limiting the expression of his wishes to a series of choices from a menu that, regardless of its sophistication, is essentially pre-programmed by the webmaster of the site in question. This programming releases the latter from the need for any human intervention up to and including the moment of the contract's conclusion by his electronic agents.⁵

These diverse characteristics of web contracts lead us to certain theses⁶ that we shall be pursuing further here. The first obliges those who use technological means to conclude a contract to develop their technological resources in such a way as to re-establish a semblance of information symmetry. A second thesis involves placing responsibility for the failure of information communications technologies on the shoulders of those who use them. Our third thesis involves an affirmation of the principles of functional equivalence: dematerialization does not automatically involve us in a renunciation of the classic protective formalities of consent but rather leases us to seek out, from among the mechanisms currently available in the new technological environment, those best suited to ensure a protection equivalent to that which was previously guaranteed by classical procedures. Fourth thesis: the quasi-immediate nature of electronic transactions via the Internet and the interactivity of the medium itself lead us to consider the e-contract not as a closed act, but as a procedure by means of which consent

³ On the different categories of Trusted Third Parties (TTP), read D Gobert, 'Commerce électronique: Vers un cadre juridique général pour les tiers de confiance', *RD TI*, no 18, 2004, 33 and f.

⁴ We are not taking up the issue of 'cookies' here, or other mechanisms enabling service operators to know, a priori, the web profile of their internet visitors, further contributing to increasing their transparency.

⁵ On the legal question raised by these electronic agents, see notably JK Wini and B Wright, *Law of Electronic Commerce* (4th edn, Alpen Law & Business, New York, 2002) 5-43, commenting on the UETA provision thereabout; Y Pouillet, 'Conclude a Contract through Electronic Agents?' in HH Weyers (ed), *Electronic Commerce—Der Abschluss von verträgen im Internet, Arbeiten zur rechtsvergleichung* n° 196 (Nomos, Baden-Baden, 2001) 65 and ff.

⁶ Here we are dealing with theses in the initial sense of the term, in other words, affirmations raised in an as yet new domain, whose demonstration by the author in outline form is intended to open rather than close a discussion. These theses make no claim to be exhaustive, thus the important role of trusted third parties in the conclusion of web contracts certainly also merits the one or other thesis. The first would be built upon the idea that the responsibility of these third parties must be reinforced by a codification of the behaviour expected of them. The second, that the issue of creating confidence through the intervention of such third parties necessitates an expanded role for the State in the definition of their licensing criteria.

is constructed. Fifth thesis: the confidence in e-commerce transactions might be only obtained by the intervention of trusted third parties in the contractual sphere.

These theses are supported by an analysis of the wealth of new legal texts that currently proliferate on the subject of electronic commerce. These may legitimately inspire new developments in regulation and jurisprudence.

A. The Obligation to Use the Technology to Redress the Symmetry of the Contractual Relationship

The 2000/31 directive dated 8 June 2000,⁷ relative to certain legal aspects of the information society, and in particular to electronic commerce in the internal market (henceforth referred to as 'e-commerce directive'), multiplies the obligations of a so-called 'information society service providers' to use the technological resources available to advise the internaut of the commercial nature of their messages,⁸ to inform him 'clearly, comprehensively and unambiguously' of their identity, of the contractual terms and conditions and the codes of conduct to which he is, in certain cases, submitting himself, of the different stages leading to a conclusion of contract and of the technological means at his disposal for the identification and correction of any errors. Such information must be accessible and downloadable at all times. With regard to the issue of easy and immediate access, one might suggest the inclusion of explicit hyperlinked icons that would appear on every page, or at least on those pages that the internaut would necessarily visit en route to a transaction.

This same principle can also be imposed on the content of a contract, both with regard to the product or service description as well as with regard to the contractual conditions of its acquisition or use. As far as the first point goes, the general principle of conformity between the goods and services being offered and the contract concerning them, affirmed by the 1999/44/CE directive of 25 May 1999 covering certain aspects of sale and guarantee for consumer goods⁹ may be subject to particular interpretation in the context of sale via the Internet. Indeed, the description required in the context of such an electronic transaction may justify more exhaustive explanatory notices, as well as more detailed images and descriptions than those normally expected on a paper medium.¹⁰ Such descriptions, or clear

⁷ OJ, 17 July 2000, L 178/1.

⁸ Ideally, an icon would be placed on the message. This icon would be recognized by specialized software embedded in the browser, which allows these commercial communications to be filtered, on an ad hoc basis, upstream of the internaut's own equipment.

⁹ OJ, 7 July 1999, L 171/1.

¹⁰ As to how the obligation of conformity for goods and services offered within the context

references to them, need to be placed where they are certain to be seen in the course of the contractual procedure.¹¹ In as much as any limits on the use of the product or service must, in accordance with the same directive, be specifically mentioned, the above principle obliges the provider to have these appear, through the automatic insertion of web pages that are obliged to come on-screen during the contractual process, if possible in immediate proximity of the definitive moment of closure (the last transactional step).

The issue of opposability in the general terms and conditions of the contract may be resolved in the same way. The only terms and conditions that can be reproached to the consumer are those of whose existence he or she has been sufficiently notified by the supplier. This means that the supplier or provider cannot simply make do with the vague presence of a hyperlink or a simple reference to conditions that are available on demand. He has a duty to not only place a clearly marked connection to these conditions at a point that will of necessity be passed by anyone engaged in drawing up a contract, but also, in the case of any clauses that are either unusual or widely derogate from common law, to insert the clause itself at a point of obligatory passage for the internaut and this in such a way as to ensure that his attention is called to it.¹² As a result, insists Gautrais,¹³

the process by which an electronic contract is drawn up cannot be considered identical to that of a paper contract, and the jurist, the lawyer, must adapt the procedure to the medium. In particular, criteria of legibility, comprehension, even reasonability . . . risk not being viewed in the same manner, depending on whether a written or an electronic document is subject to analysis.

of an internet transaction engenders specific duties with regard to information, and the modalities of this, we refer the reader to a remarkable article by S Cavanilas Mugica, 'Dix thèses sur la protection du "consommateur électronique" d'après la Directive sur la vente et les garanties de consommation' (2001) 7 *Ubiquité*, 99 et seq.

¹¹ The same reasoning may be deduced from the directive 97/7/CE of 20 May 1997 concerning consumer protection in correspondence contract issues. This requires, with respect to the principles of loyalty in commercial transactions and taking into account the technology being used, that the consumer benefits from clear and comprehensible information. It is obvious that they nature and qualities of such information will be different depending on whether the supplier chooses telephone or Internet.

¹² eg by using a technique called 'flickering' or by stalling the process until the internaut indicates, with a mouse click, his agreement to the clause.

¹³ V Gautrais, 'Les contrats en ligne dans la théorie générale du contrat : le contexte nord-américain', in *Le commerce électronique—Le temps des certitudes*, Bruylant, Cahier du Crid no 18, 113.

B. Making Use of Technology for the Conclusion of a Contract Makes One Liable for the Risks Involved in the Case of Technological Failure

The introduction noted that for web contracts, the drawing-up and conclusion of the contractual process is carried out via artificial intelligence systems¹⁴ that, at least with regard to the operational viability of the supplier's business from an economic point of view, advantageously replace human intervention. Our intention here is not to question the validity of a contract concluded by an electronic agent¹⁵ rather than through the voluntary declaration of human intent,¹⁶ but rather to enquire as to the possible repercussions of a programming error that, for the sake of argument, results in a transaction disadvantageous for the supplier.¹⁷ Two theoretically possible paths emerge to bind the supplier notwithstanding this error: either that of recourse to argumentation on the basis of legal responsibility, or to consider that reliance on such systems for the conclusion of a contract carries with it the risk of dealing with the consequences of such mishaps as part of the price to be paid for the creation and maintenance of consumer confidence in electronic contracts.¹⁸ In practice, the solution would be the same in so far as the supplier would have a difficult time proving the absence

¹⁴ Note that such systems are more and more sophisticated: certain of them even being capable of learning. In other words, these systems do not merely act in accordance with predetermined parameters, but as a function of other criteria learned by experience and thus out of the range of direct human intervention.

¹⁵ On that point, we raise the question of the absolute need to recognize legally the possibility of electronic signature issued by legal persons. It is quite clear that no individuals will accept to be automatically the signatory without having any possibility of checking the transactions generated by the electronic agent. For a discussion about the validity of signature of legal persons, read B Van Brabant, 'La signature électronique des personnes morales' in *La preuve*, CUP, Vol 54, Ed Formation permanent, Liège, March 2002, p 173 and ff.

¹⁶ On this question, see Y Pouillet, 'La conclusion du contrat par un agent électronique' in *Commerce électronique—Le temps des certitudes*, Bruylant, Cahier du Crid no 18, 129 and ff. On the nub of this question with regard to the debate in Roman Law: Windscheid—Von Savigny on the legal basis for the obligatory nature of a contract (theory of 'Willensklärung' or of 'Vertrauen'); read W Kilian, 'Electronic Commerce—Der Abschluss von Verträgen im Internet' in *Arbeiten zur Rechtsvergleichung*, no 196 (Nomos, Baden-Baden, 2001) 30 ff. One may note in addition the acceptance in numerous regimes, including that of Belgium of the electronic signature of legal entities: Art 4 § 4 of the law of 9 July 2001 fixing certain rules relative to the juridical framework for electronic signatures and certification services, MB, 29 Sept 2001, 33.070 ff) gives yet more credit to the distance between a contract and the expression of individual free will.

¹⁷ ...either because the price of the transaction was badly calculated, or because the transaction took place although the product was no longer in stock or no longer in production.

¹⁸ This is entirely the doctrine of 'attribution' developed by R Nimmer, 'Electronic Contracting: Legal Issues' (1996) 14 *Journal of Computer and Information Law*, 211 ff, which is at the root of the highly controversial disposition in Article 2B of the American 'Uniform Commercial Code', according to which it is less important to determine the will being expressed within an electronic contract than it is to clarify the attribution of risk which devolves from the mode in which it was drawn up.

of his personal fault or that of a sub-contractor, depending on the measure of his contribution to the appearance or mechanics of the contractual process. The only hypothesis that would support his non-responsibility would be that wherein, given the dimensions of the error, he could reasonably insist that repudiation of the contract would not violate the legitimate confidence of the contracting internaut.¹⁹ To be quite clear, a contracting party, in so far as his behaviour creates a situation that gives rise to legitimate expectations in the mind of the other contractor, is legally bound by his role as 'master' of the electronic agent.²⁰

Applications of the same principle can be found in other dispositions aiming to hold the person choosing to use electronic technologies for the conclusion or execution of a contract responsible for the tools they are using or over which they have control. This is nothing new if we consider electronic payment systems²¹ or electronic signatures²² where the legislator has reasserted the classic doctrine under which the bearer of a support medium or signature code carries responsibility for the consequences of its loss or confidentiality leakage, insofar as he or she has not yet notified the body responsible for issuing the payment support medium or signature certificate. In the e-commerce directive, the same principle is applied where it states that messages relating to the placing and reception of an order are considered as having been received as soon as the parties to which they are addressed can access them, which is to say not when they actually become aware of them, but as soon as they have arrived on their email server, thereby entering the risk zone deemed as being covered by their own responsibility as recipient.

¹⁹ On this matter, the argument taken by J Winn and B Wright, *Law of Electronic Commerce* (4th edn, Aspen Law & Business, New York, 2001) 5-24.1 with regard to the case of United Airlines (Feb 2001) in which, as the result of a programming error, ticket prices for a certain destination were calculated solely on the basis of airport taxes and suchlike administrative costs. According to the authors, the company's responsibility was engaged, in as much as customers might legitimately believe that this was a genuine promotional offer.

²⁰ cf the parallel reasoning founded on the theory 'declared will and obstructive error' from Mss Lecocq and Biquet, 'Le commerce électronique : conclusion et preuve du contrat', in *Rapports de droit belge au Congrès de droit comparé de Brisbane* (Bruylant, Bruxelles, 2002).

²¹ On this issue, the hypothesis drawn up by X Thunis, 'Responsabilité du banquier et automatisation des paiements' (Travaux de la faculté de droit de Namur, PUN, no 19, 251) and largely dismantled by the same author in the development of the thesis: 'Our hypothesis is that a "title supplier of automated services" may emerge, where responsibility is no longer based on articles 1239 and 1937 of the Civil Code'. This hypothesis is given broad credit by the recommendation of the European Commission, 30 July 1997, concerning operations carried out via automatic payment portals, JO, 1997, 2 Aug 1997, L208. (On this subject, Y Pouillet and J-F Lerouge, 'Responsabilité des acteurs de l'Internet', *Rapport de droit belge au Congrès de droit comparé de Brisbane* (Bruylant, Bruxelles, 2002) 1043 ff)

²² cf Art 8 of the sample law of the CNUDCI, which defines the 'norms of behaviour for signature', in particular that of responsibility for the security of his or her own keywords or codes. On this peculiar topic, see MA Schellekens, *Electronic Signatures, Authentication Technology from a Legal Perspective* (TMC Asser, Information Technology & Law Series no 5, 2004), particularly 101 ff: 'The division of risks'.

C. The Trend Towards a 'Proceduralization' of Contract Conclusion

A characteristic of interactive networks is the instantaneous sending and reception of messages. This contrasts with lengthy delays sometimes engendered when concluding a contract by traditional correspondence. We need to consider the danger that the internaut may find him or herself bound to an order for goods or services that he either does not really want or has given insufficient consideration to. This fear led the e-commerce directive's authors to announce the following principle: 'The Member States will take care that the various stages to be followed in the conclusion of an electronic contract should be such as to assure complete and informed consent'.²³ In other terms, by passing through and respecting the consecration of these various online stages in the submitting of an order, the Internet contract itself is drawn up and concluded. With regard to these different stages in the ordering process, the final text of the directive insists on the information that must be given the consumer, obliging the insertion into the process of a error correction mechanism and it subordinates the passing of the order not only to its reception, but above all to reception, by the internaut consumer, of an order reception confirmation, which must be transmitted by the supplier 'without delay via electronic means'. In addition, the 'remote contracts' directive imposes the dispatching of an order confirmation on a durable support medium. In the same spirit, Luxemburg law²⁴ calls for the supplier to present an order recapitulation page on screen immediately prior to the transaction's conclusion.

This 'proceduralization' of electronic contracts, while it may diminish somewhat the spontaneous, instantaneous and dynamic character of presentation and communication within this type of transaction, it does in some way restore the advantages of the traditional slow-cooking processes typical of a normal correspondence contract. The supplier/provider is obliged to ensure that the stages leading to closure of an electronic contract, such as they are imposed by the nature of the programming he has put in place, effectively enable complete and genuinely informed consent. We observe here the consequences of the second thesis articulated previously.

²³ Refers to the first version of Art 10(1) of the draft directive. The withdrawal of this text was justified by the desire of the authors not to refer to juridical notions, such as conclusion of contract or offer, but to keep purely to a commercial vocabulary, hence the notion of submitting an order. This was intended to avoid judicial disputes between the Member States on the interpretation of legal terminology.

²⁴ Art 62 of the Luxemburg law: 'From recapitulation to transaction; Before the contract is concluded, the professional must insert a recapitulation procedure detailing all the choices made by the consumer and giving him or her the opportunity to confirm these choices advisedly or to modify them at his or her convenience' (author's translation).

Fundamentally, we may agree with Katsch,²⁵ when he says 'Paper contracts bind parties to an act. The electronic contract binds parties to a process.' Such an assertion takes fully into account the interactive nature of the technology used. Where the different stages of a traditional contract are effaced by the nominative force of the document itself, which then represents, or is considered to represent, a final accord, in other words, there where the correspondence contract only identifies two key moments of offer and acceptance, the interactivity of contracts concluded over the Internet enables consent to be constructed gradually in the context of a continuous dialogue within which it becomes difficult to isolate those classic moments of offer and acceptance. Do the declarations on a web page amount to an offer or an invitation to contract? The answer is not easy, when one considers that this page, depending on the individual case,²⁶ may be followed by others through which the internaut narrows his focus onto the object of choice, prefers particular modes of payment, accepts or rejects this or that more surprising clause, and in some cases even asks for the individual customization of his final choice. We can imagine why the framers of the e-commerce directive have avoided referring to the stages of contract formation,²⁷ preferring to speak more vaguely of the submission of an order. Some authors²⁸ may regret that we have become distanced from the doctrinal certitudes of the classic contract as representing an encounter between offer and acceptance, but it seems to us that the reality of the way in which an Internet contract is constructed obliges us to discard such concepts.²⁹

²⁵ ME Katsch, 'Law in a Digital World' 129. cf W Kilian, 'Electronic commerce—der Abschluss von Verträgen im Internet' 16, which opposes the classic model of contract conclusion to that of Internet contracting, where the contract must be examined as an 'informational and decisional procedure' ('Informations-und Entscheidungsprozess').

²⁶ In our opinion, a web page presenting a product may better be qualified simply as an entry into negotiations, rather than an 'invitatio ad offerendum'.

²⁷ The first version of the directive (former wording of Art 11) spoke of 'offer' and fixed the moment of contract formation. For more about this first version, the reasons for abandoning the initial text and the consequences of this, read in particular R Julia-Barcelo, E Montero and A Salaün, 'La proposition de directive sur le commerce électronique: Questions choisies', op cit 29 ff; M Demoulin, 'La passation d'une commande sur les réseaux' in *Le commerce électronique enfin sur les rails?* Cahiers du Crid n° 19 (Bruylant, Bruxelles, 2001) 255 ff.

²⁸ Thus, among others, L Grynbaum, 'La Directive "e-commerce" ou l'inquiétant retour de l'individualisme legal' (2001) JCP—La Semaine Juridique Entreprise et Affaires 1621: 'Such a dichotomy between traditional modes and the Internet must be avoided at all costs; a situation in which the formation of a contract is subject to the goodwill of the supplier is certainly not a desirable outcome . . . '.

²⁹ One may compare this phenomenon to that of contracts whose objective complexity and parametric multiplicity lead to a proliferation of documents, each bearing witness to an increasingly chaotic chain of negotiations (letter of intention, negotiation report, memorandum of understanding, etc). On such contracts and the value of documents of diverse quality and statute read M Fontaine, 'Les lettres d'intention dans la négociation des contrats interna-

Thus the e-contract is born out of a process, each phase of which must be taken into account in its interpretation. This reflection is inspired by the highly pertinent thesis of S Cavanilhas³⁰ with regard to the notion of goods and services conformity for purchases acquired via a website. According to the author, conformity must be appreciated as a function of the legitimate expectations raised by the entirety of the route likely to have been taken by the internaut on the way to his transaction. This assertion leads us to consider that the furnishing party should be bound, not only by the content of promotional pages past or present which spring up along the route the internaut takes through the supplier's own website, but also³¹ by those pages external to that site, but which have accompanied or guided the internaut there on his itinerary: such as publicity banners or linked pages on web portals, search engines or promotional websites inviting the internaut, via hyperlink, to drop by at the supplier's homepage. Our conviction is founded on the fact that the supplier himself, via a series of descriptive discourses, often directly or indirectly creates the internaut's legitimate expectations. This occurs through the embedding of 'metatags' or by the very nature of the supplier's contractual arrangement with his web provider or hosting service.

D. The Necessity of Defining Functional Equivalents to the More Traditional Forms Protecting Consent

The necessity of adapting the rule of law to new technologies has, in the cases of the rights of signature and of the written document, been subject to a healthy principle. The legislator is invited to clarify the functional characteristics of signature and written document in order to be able to consecrate electronic signatures and documents that respond to these characteristics. In this regard, we may highlight the importance of the work carried out by the UNCITRAL, which, by means of a 'Model law' on e-commerce,³² has defined those functional conditions of acceptance and

tionaux' (1977) DPCI 76 ff. That which is interesting on the subject of Internet contracts, is that we are witnessing a necessary generalisation into the domain of simple consumer transactions of a form of reasoning formerly restricted to major commercial contracts.

³⁰ S Cavanilhas-Mugica, 'Ten theses on the protection of the "electronic consumer" according to the Directive on the sale and warranty of consumer goods' (2000) 7 Ubiquité 103 ff.

³¹ The author demonstrates heightened prudence towards this extension, inasmuch as he cites numerous arguments to support the presumption of extending the obligation of conformity to web pages or banners external to the supplier's own site.

³² § 16 of the preamble to the sample law on e-commerce defines that which is meant by 'functional equivalence'—'which is based on an analysis of the purposes and functions of the traditional paper-based requirement with a view to determining how those purposes or functions could be fulfilled through electronic commerce techniques'. On that approach, see D

probate in as much as they relate to electronic signatures and documents.³³ Beyond these issues of signature and document, the same principle should be applied to the entirety of legal formalisms required by specific legislative provisions for the protection of consent or for administrative reasons and which are paper based (handwriting mentions, double exemplar, etc). The text of Article 9 of the European e-commerce directive raises the opportunity of such a reflection:

The Member States will take particular care that the judicial regime applicable to the contractual process does not become an obstacle to the use of electronic contracts, nor lead to such contracts being deprived of effect or judicial validity due to them having been drawn up electronically.

Formalities requirements are legion within our legislative arsenal and pursue a diversity of goals that can be summarized as follows: attract the attention of the person invited to sign an engagement to the significance of this action and the risks involved in appending ones signature below. The psychological effect of formalities is essential, but processes adapted to the communications technology being used may also achieve this. Thus a flashing script that must necessarily appear at a certain moment in the contractual process may better fulfil the intended aim of the requirement to write clarifications in bold characters. The effect of writing a phrase by hand, which is required to draw the signatory's attention to the significance of his or her engagement, may be attained by a pre-programmed obligation to type in certain phrases or by the necessary recourse to electronic signatures in cascade. In this spirit, we can understand the disposition contained in the Belgian Act transposing the e-commerce directive,³⁴ which is expressed as follows:

Gobert and E Montero, 'La signature électronique et les paiements électroniques: l'approche fonctionnelle', in *Commerce électronique. Le temps des certitudes*, Cahier du Crid, no 17 (Bruxelles, Bruylant, 2000), 53 ff.

³³ On this functional approach to written documents and signatures read, among others, D Gobert and E Montero, 'La signature dans les contrats et les paiements électroniques' (2000) DAOR 17 ff. As well as by the same authors, 'L'ouverture de la preuve littérale aux écrits sous forme électronique' (2001) JT 114 ff.

³⁴ 'Toute exigence légale ou réglementaire de forme relative au processus contractuel est réputée satisfaite à l'égard d'un contrat par voie électronique lorsque les qualités fonctionnelles de cette exigence sont préservées' (Art 17 § 1 of the Belgian Act (Loi du 11 mars 2003 sur certains aspects juridiques des services de la société de l'information, MB, 17 mars 2003). This Act is the transposition of the EU e-Commerce directive dated from 8 June 2000 (OJ no L 178, 17 July 2001, 1-16)). On this provision and the need to extend the 'functional equivalency' theory. See also, Sur cette théorie, son intérêt et sa consécration en droit belge par l'article 16 de la loi du 11 mars 2003, lire entre autres: M Demoulin and E Montero, 'La conclusion des contrats par voie électronique' in M Fontaine (sous la direction de), *Le processus de formation du contrat. Contributions comparatives et interdisciplinaires à l'harmonisation du droit européen* (Bruxelles, Bruylant et Paris, LGDJ, 2002) 716, no 32.

If within the course of the contractual process a formality is required, which might pose, either directly or indirectly, a hindrance to the conclusion of that contract by electronic means, such a requirement must be interpreted independently of the form of contract or type of support medium. In any hypothesis, the functional qualities of the formality under consideration must be respected.

This, notes Cavanilhas,³⁵

is why the old rules, the ones that we are itching to abrogate or modify, should be subjected to a final teleological test. Are all those interests that were protected by the old law still protected, sufficiently and in an equivalent manner, under the new regime?

As regards the formal requirements existing in administrative documents, the same principle of functional equivalency might solve one major problem met in the development of the e-Government. So in Belgium, the Walloon Government³⁶ has required that all the formalities required in the context of administrative documents have to be evaluated in order to find a solution which will permit the use of electronic documents.

E. Trust in Electronic Transactions Requires the Intervention of Multiple Trusted Third Parties

Trust in electronic commerce requires the intervention of multiple trusted third parties.³⁷ One quotes: the registration authorities³⁸ which certify the

³⁵ S Cavanilhas-Mugica, 'An introduction to web contracts', in I Walden and J Hörnle (eds), *E-commerce Law and Practice in Europe* (Woodhead Publishing Ltd, Cambridge, 2001) s 2, ch 1, p 9.

³⁶ See 14 Dec Walloon Decree MB 27 Dec 2006, 74735: 'Article 1er. Un formulaire électronique de la Région wallonne complété, validé et transmis, avec ses éventuelles annexes, conformément aux modalités et conditions définies par le Gouvernement, est assimilé au formulaire papier portant le même intitulé, complété, signé et transmis, avec ses éventuelles annexes, à l'administration concernée, conformément aux dispositions décretales et réglementaires.'

³⁷ See, already on this phenomenon and its interest for protecting consumers in the cyberspace, S Louveaux, A Salaün and Y Pouillet, 'Protection in Cyberspace. Some recommendations' (1999) 1 Info 521 ff.

³⁸ The registration authority might be different from the certification authority. For example, the Bar Associations will check the quality of their members and issue a certificate towards the certification authority which will issue the certificate but has no mean to check the professional abilities of the lawyer requiring an electronic signature. The problem of the liability of these distinct registration authorities is less developed by the doctrine until now. See, on their function, C Pouillet and R Vuitton in A Prüm, Y Pouillet, and E Montero (ed), *Le commerce électronique en droit luxembourgeois* (Larcier, Bruxelles, 2005) no 256 ff.

quality and the identity of an individual or a legal person, eventually his or her professional quality or other characteristics; the certification authorities³⁹ which authenticate the user of an electronic signature by associating the use a key with a certificate; the labelling systems⁴⁰ which affix a mark on a web site, certifying thereby the respect by the site of the labelling conditions; and, finally, the On Line Dispute Resolution Systems (the ODR),⁴¹ which provide the possibility through on line mechanisms to solve litigation more rapidly and efficiently than before official jurisdictions. How to explain the need of their intervention and their increasing success? Is that because the electronic contract is concluded between parties located at distance, without consideration of geographical and national frontiers? That distance generates distrust and obliges to make recourse to external partners, whose role is to offer the confidence needed for contracting. Is that because the technology is like a black box wherein we are never sure that it works like asserted by our contractor? The opacity of the technologies' functioning leads to raise the following questions among a lot of others: is the processing used by the contractor recording correctly my messages? Is the web site just a window dressing or does it correspond with a real activity? Definitely all these aspects are explaining the intervention of third parties.

In our traditional codes, minor place is afforded to this kind of actors in the contractual sphere, with a major exception: the notary.⁴² The notary's office is severely regulated by legislative regulation and a specific legal status is reserved for members of that profession. As regards the new jobs we are referring, except for the providers of electronic signatures certificates,⁴³ noth-

³⁹ Their regulation is largely described by the Directive 99/93/EC of 13 Dec 1999 on a Community framework for electronic signatures, OJ L 013, 19/01/2000, 12 ff and its annexes. About a good analysis of this regime, read notably, C Pouillet and R Vuitton in A Prüm, Y Pouillet, and E Montero (ed), *Le commerce électronique en droit luxembourgeois* (Larcier, Bruxelles, 2005), 239 ff.

⁴⁰ Y Pouillet, R de Bruin, C Lazaro, E Keuleers, and M Viersma, *Analysis and definition of common characteristics of trustmarks and web seals in the European union*, final report, Feb 2005, European Contract no B5-1000/03/000381 (DG Sanco) 104pp.

⁴¹ On the ODR phenomenon, see the important thesis written by T Schultz, *Réguler le commerce électronique par la résolution des litiges en ligne*, Cahier du Crid, no 27 (Bruxelles, Bruylant, 2005). From the same author, the description of the e-Bay ODR system, 'e-Bay: un système juridique en formation' (2005) RDTI 27 ff. See also, C Rule, *Online Dispute Resolution for Business* (Jossey-Bass, San Francisco, 2002).

⁴² The notary might certify a lot of things linked with the quality of the person (legal or physical) by a certificate of 'notoriété'. He also authenticates the signature and the existence of the transaction vis-à-vis third parties. Other exceptions exist: the 'time stamping function' played by certain administration and the certificate of sending and the 'acknowledgment of receipt' delivered traditionally by the public postal office.

⁴³ On that point, about the description of the accreditation procedures and their values for the general interest, see already, R Baumgart et al, 'Evaluation and Akkreditierung von systemen zur digitalen Signatur und deren Infrastruktur' in P Horster (ed), *Digitale Signaturen* (DuD Fachbeiträge, Vieweg, Wiesbaden, 1996) 93 ff.

ing is foreseen by the legislator until now⁴⁴ and it must be underlined that these functions are operated by private companies in a free market.⁴⁵ Everything is fixed by self-regulatory documents⁴⁶ and, in most of the cases, there is no contract between the trusted third party and the contractor. The consumer is thus facing multiple systems whose functioning is sometimes difficult to understand.⁴⁷ Furthermore, the liability occurred by these institutions is at the legal point of view quite dubious even if the sanctions against these third parties not respecting their own commitments might occur from the market.

Apart from these considerations, the question raised is: do we need a legal framework surrounding this kind of activities? If we agree that the legislative intervention is only subsidiary and that the legislator ought to intervene only in case of market failure, it remains that certain minimal requirements of quality as regards the service offered, of transparency of its characteristics, of appropriate sanctions available for the inter-nauts in case of non compliance of the TTP with these requirements might be defined and a system of public accreditation or licensing ought to be put in place.⁴⁸ E-confidence is at that prize.

F. Conclusions

Should 'electronic contracts' be considered as being any different from paper ones? This is the question raised by the preceding considerations. It is certainly useful to remember that the expression electronic contract only

⁴⁴ Even if in certain countries, voluntary accreditation systems are foreseen as regards trustmarks at least. These accreditation are delivered either by public authorities (see the Luxembourg e-certified system), or by co-regulatory organs like in UK with Trustmark.uk, which joins together representatives from consumer associations and business organizations.

⁴⁵ Contrary to the traditional TTP mentioned in 42, which were belonging to public administration or public agents.

⁴⁶ About self-regulation as an alternative mode of market regulation, see T Schultz (n 41) particularly, pp 377 ff; Y Poullet, 'How to regulate Internet?: New Paradigms for Internet Governance' in J Berleur et al (eds), *Variations sur le droit de la société de l'information*, Cahier du CRID, no 20, 130 ff.

⁴⁷ That is one of the major conclusions of the EU study on labelling services already quoted above, n 41.

⁴⁸ eg the trustmark or label scheme is worth being analysed in that perspective since European initiatives (notably the Joint Research Center (JRC) e-confidence Forum initiative (see the e-confidence website available at <<http://www.econfidence.jrc.it/default/htm>>)) are tempting to organize some coherence in the e-commerce (including a data protection dimension) trustmark systems by establishing meta-trustmarks (common European basic criteria for an adequate e-commerce trustmarking), which would be on the responsibility of public regulation or co-regulatory initiatives. In Belgium, a draft bill has been recently proposed by the Ministry of Economy to regulate certain TTP activities. About the main principles guiding that draft bill and its scope, see D Gobert, 'Commerce électronique: Vers un cadre juridique général pour les tiers de confiance' (2004) 18 RDTI 33 ff.

targets the method of contract creation and not the material content particular to a certain category of contract.⁴⁹ In other words, the incidence of technology bears solely on the rules for the drawing up of contracts to the exclusion of other rules. This amounts to calling on the legislator to recognize the validity and probate value of such contracts without sacrificing the traditional rules but rather by enquiring into their purpose and then into the manner in which the new technologies might satisfy these functional demands.⁵⁰

Beyond this, the interactivity of the medium used for the transaction invites one to consider—although this is none other than an application of the principle of good faith in the creation of a contract—that the supplier is obliged to give certain supplementary information and to make maximum use of the medium's resources to enable the internaut to express his clear and informed consent both with regard to the content of the transaction and its modalities. This interactivity obliges the construction of the contract as a process during which certain 'legitimate expectations' are awakened in the online buyer with regard to the goods or services concerned as well as the modalities of the contract itself. Finally, if the technology used presents risks, these risks must be shared according to the zones of sovereignty of each contractual party, except in those cases where the effects of a technological lapse or malfunction give rise to legitimate expectations or a false sense of confidence in the opposing contractor and definitively the intervention of regulated TTP is to be pinpointed in order to create confidence between contracting actors.

To conclude, it is definitively not our intent to assert that ICT claims for a radical modification of the contract law paradigms. On the contrary, as it has been the case with other phenomena like the consumers' contracts (a topic you know very well, Guido) or employees' contract, it is important to analyse to what extent these phenomena due to their specificities require to adapt the traditional provisions in order to maintain the balance enshrined in the traditional contract law. The problem is not to create a new legal framework specific for electronic contract but to deepen the consequences of the introduction between the two contractors of a technology since its use affects undoubtedly their behaviour and affects dramatically the traditional balance of their contractual powers by creating an asymmetry of information.

⁴⁹ On this point, read DL Kidd and W Daughtrey, 'Adapting Contract Law to Accommodate Electronic Contracts' (2000) 26 Rutgers Computer and Technology Law Journal 269.

⁵⁰ This approach might lead to conclusions quite divergent from what was traditionally considered as intangible in traditional legal doctrine. For example, the signature might be possible for a legal person what was considered as impossible with the hand-written signature. See B Van Brabant, 'La signature électronique des personnes morales' in *La preuve*, CUP, vol 54, Liege, éd Formation permanente, Mar 2002 173 ff.